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EXAMINER	
LAMBRECHT, CHRISTOPHER M	
ART UNIT	**PAPER NUMBER**
2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/471,208	ROSE ET AL.	
	Examiner	Art Unit	
	Christopher M Lambrecht	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 27* is/are rejected.

7)☒ Claim(s) *24-26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 1999* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's remarks on page 14 of the response filed 8 October 2004 that there is nothing to teach or suggest that the data streams described in Zamiska are associated with different scenes of a single 3D animated content, the Examiner submits the following:

The Examiner agrees with Applicant's assertion on page 14 that Zamiska teaches the streams may be associated with different types of data (as described in col. 6, ll. 18-21). However, Zamiska additionally discloses in columns 10 and 11 that the various streams (i.e., digital information files) may correspond to first (from time t=1 to t=3) and second (from time t=2 to t=4) portions (i.e., scenes) of a videotape containing footage of an event (i.e., a single multimedia content, see col. 9, ll. 58-65 and col. 10, l. 14 – col. 11, l. 13).

Additionally, Zamiska discloses aspects of the invention may be applied to works of 3D animation (see col. 3, ll. 45-50).

Consequently, Examiner respectfully disagrees with Applicant's content that Zamiska fails to teach or suggest that the streams in Zamiska are associated with different scenes of a single 3D animated content.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because they contain illegible handwritten text. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer

prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 7, 9-12, 14-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra (of record) in view of U.S. Patent No. 6,27,650 to Meyer et al. (supplied by Applicant; hereinafter "Meyer"), Zamiska (of record) and Progressive Networks (of record).

With regard to claims 1 and 9, Kalra discloses: in a computer network (fig. 12, col. 14, ln. 63 – col. 15, ln. 4) allowing communication between a host computer (server 400, fig. 12) and a plurality of remote user computers (500_1-500_N, fig. 12), a system and method for packaging 3D animated content data (col. 4, ll. 47-53) for distribution to the remote user computers over a network connection (col. 14, ln. 63 – col. 15, ln. 4 & col. 19, ll. 36-46), the system comprising: means for identifying a set of pre-load data (global data parameters, etc., col. 19, ll. 52-57) for being delivered over the network connection before playback of the animated content (transmission of global scene graph data is required before the scene can be rendered, col. 20, ll. 17-20); means (memory) for storing the pre-load data in a pre-load file (col. 21, ll. 61-66); means for identifying a set of streaming data (col. 20, ll. 20-29) for being streamed over the network connection during playback of 3D animated content (the client device renders 3D frames one after another (i.e., "current frame" and "new current frame"), as the necessary information is received from the server, col. 23, ll. 38-40, 42-44, and 50-54, hence, the streaming data is streamed over the

network connection during playback); means for identifying a data rate available to the remote user computer for streaming the streaming data (streaming module obtains a resolution profile from client device (multimedia device 22, fig. 2A), col. 4, ll. 24-27; where the streaming data comprises animation, col. 4, ll. 47-52, a frame rate is inherently involved; furthermore, the product of a resolution and a frame rate comprises a data rate; hence, by obtaining a resolution profile from the client device, a data rate is inherently obtained; see also col. 15, ll. 33-44 and col. 19, ll. 59-64); means for storing the streaming data in a stream file associated with the scene (col. 21, ll. 61-66; col. 22, ll. 7-10; and col. 22, ll. 13-15); and means for streaming (stream management module 20, fig. 2A) the stream file over the network connection during playback of the scene (col. 23, ll. 44-57, the client device renders 3D frames one after another, as the necessary information is received from the server, col. 23, ll. 38-40, 42-44, and 50-54, hence, the streaming data is streamed over the network connection during playback). Kalra fails to discloses said single 3D animated content comprises first and second data, the first and second data being respectively associated with first and second scenes of said single 3D animated content; means for identifying a duration of said first and second scenes; storing the first and second scenes in first and second files associated with each scene, each of said files being of a size calculated from the identified data rate and the duration of the scene; streaming each file over the network during playback of the respective scene; and, each stream file is calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene.

In an analogous art, Meyer discloses a single 3D animated content (col. 5, ll. 66-67 and col. 13, ll. 16-18) comprising first and second data, the first and second data being respectively associated with first and second scenes of said single 3D animated content (see fig. 3; col. 7, ll. 31-34, col. 8, ll. 2-10), for the purpose of adding interactivity to the user (col. 2, ll. 35-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the 3D animated content of Kalra to include first and second data, the first and

second data being respectively associated with first and second scenes of said single 3D animated content, as taught by Meyer, for the purpose of adding interactivity to the user. Kalra and Meyer fail to disclose means for identifying a duration of said first and second scenes; storing the first and second scenes in first and second files associated with each scene, each of said files being of a size calculated from the identified data rate and the duration of the scene; streaming each file over the network during playback of the respective scene; and, each stream file is calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene.

In an analogous art, Zamiska discloses means (information manager 108, fig. 2) for identifying the duration of a scene (identifying the duration of a stream, col. 7, ll. 64-67, where the duration of a stream comprising a digital source information file corresponds to the duration of the source information (scene) from which it was captured, e.g., from a 30 minute reel of film, col. 7, ll. 53-58), for the purpose of facilitating the synchronization of various streams (col. 7, ll. 39-51).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra and Meyer to include means for identifying the duration of each of said first and second scenes, as taught by Zamiska, for the purpose of facilitating the synchronization of various streams in a system for distributing 3D animated content. Kalra, Meyer, and Zamiska fail to disclose each of said files being of a size calculated from the identified data rate and the duration of the scene; streaming each file over the network during playback of the respective scene; and, each stream file is calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene.

Additionally, in an analogous art, Progressive Networks discloses a stream file being of a size calculated from an identified data rate (where the file is appropriately encoded according to available bandwidth, pg. 29, 67, and 68) and the duration of said scene (where the size of a steam file is inherently calculated based on the duration of a scene, i.e., file size is $\geq$ (data rate of the file) x (scene duration));

said stream file calculated to finish downloading by the remote user computer prior to the end of the playback of said scene (where the data rate of the file to stream is determined based on the bandwidth supported by the client, pg. 67, and the server selects the highest bandwidth file supported by the client (i.e., stream bandwidth is equal to or less than the client bandwidth), the stream file is inherently calculated to finish downloading prior to the end of the playback of the scene), for the purpose of delivering the best quality stream that is supported by the connection (pg. 67).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra, Mayer and Zamiska and to include each stream file being of a size calculated from the identified data rate and the duration of the respective scene; each stream file is streamed over the network during playback of the respective scene; and each stream file calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene, as taught by Progressive Networks, for the purpose of delivering the best quality stream that is supported by the connection in a system for distributing 3D animated content.

As for claims 2 and 10, Kalra, Meyer, Zamiska, and Progressive Networks together disclose the claimed subject matter. In particular, Kalra discloses the streaming data comprises animation data (streams comprise 3-D animation, col. 4, ll. 47-52).

As for claims 3 and 11, Kalra, Meyer, Zamiska, and Progressive Networks together disclose the claimed subject matter. In particular, Kalra discloses the streaming data in the stream file is packaged into a plurality of streamable blocks (where adaptive digital streams, e.g., base stream $14A_b$, first additive stream $14A_1$, etc., fig. 2A, are individual streams or "blocks" of streamable data, selected by stream management module 20 for transmission to the client, col. 4, ll. 14-32).

As for claims 4 and 12, Kalra, Meyer, Zamiska, and Progressive Networks together disclose the claimed subject matter. In particular, Zamiska discloses identifying a time in which each streamable block is required by the remote computer during playback of the scene (identified by start times, reflected in DSI record 112 of the digital information file, 100, fig. 2, col. 7, ll. 39-45, i.e., where two or more portions (scenes) of a video tape are captured to a single source file, each being 30 minutes in length, the identified time for which the first portion (scene) is needed would be t = 0, while the identified time for which the second portion (scene) is needed would be t = 30 minutes); and determining the position of each block in the stream file based on the identified time (information manager 108 positions various streams according to respective start times relative to a time axis of the data cube 120, col. 7, ll. 52-63), the position calculated to allow the remote user computer to download the block prior to the time the block is required (the blocks are positioned sequentially in time, and as described in claim 1, where the data rate of the streaming data is chosen equal to or less than the data rate available to the client, data (blocks) are inherently downloaded prior to the time they are required).

As for claim 7, Kalra, Meyer, Zamiska, and Progressive Networks together disclose the system of claim 1. In particular, Kalra discloses pre-loading the pre-load file (global scene graph data) before playback of the 3D animated content (transmission of global scene graph data is required before the scene can be rendered, col. 19, ll. 52-57 & col. 20, ll. 17-29).

With regard to claim 14, Kalra discloses: in a computer network (fig. 12, col. 14, ln. 63 – col. 15, ln. 4) allowing communication between a host computer (server 400, fig. 12) and a plurality of remote user computers (500_1-500_N, fig. 12), a system for packaging a single 3D animated content data (col. 4, ll. 47-53) for distribution to the remote user computers over a network connection (col. 14, ln. 63 – col. 15, ln. 4 & col. 19, ll. 36-46), the system comprising: a pre-load file storing a set of pre-load data (global data

parameters, etc., col. 19, ll. 52-57 & col. 21, ll. 61-66) for being delivered over the network connection before playback of the animated content (col. 20, ll. 17-20, transmission of global scene graph data is required before the scene can be rendered); a stream file storing a set of streaming data (col. 20, ll. 20-29) for being streamed over the network connection during playback of 3D animated content (the client device renders 3D frames one after another (i.e., "current frame" and "new current frame"), as the necessary information is received from the server, col. 23, ll. 38-40, 42-44, and 50-54, hence, the streaming data is streamed over the network connection during playback); a mass storage device for storing the pre-load file and the stream-file (memory, col. 22, ln. 66 –col. 23, ln. 7); and, a production module (graphics computer program, col. 19, ll. 40-46) in communication with the mass storage device (where the graphics computer program is executing on transcoder 10, col. 19, ll. 40-46, and storing is performed as illustrated in fig. 17, col. 23, ll. 3-7, where fig 17 details operation of the transcoder, col. 20, ll. 8-13), the production module including logic for: identifying the pre-load data for the single 3D animated content and streaming the data for a scene of the 3D animated content (col. 23, ll. 35-44); and storing the identified pre-load data in the pre-load file (col. 23, ll. 3-7); and identifying a data rate available to the remote user computer for streaming the streaming data (streaming module obtains a resolution profile from client device (multimedia device 22, fig. 2A), col. 4, ll. 24-27; where the streaming data comprises animation, col. 4, ll. 47-52, a frame rate is inherently involved; furthermore, the product of a resolution and a frame rate comprises a data rate; hence, by obtaining a resolution profile from the client device, a data rate is inherently obtained; see also col. 15, ll. 33-44 and col. 19, ll. 59-64). Kalra fails to discloses said single 3D animated content comprises first and second data, the first and second data being respectively associated with first and second scenes of said single 3D animated content; identifying a duration of said first and second scenes; storing the first and second scenes in first and second files associated with each scene, each of said files being of a size calculated from the identified data rate and the duration of the scene; streaming each file over the network during playback of the

respective scene; and, each stream file is calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene.

In an analogous art, Meyer discloses a single 3D animated content (col. 5, ll. 66-67 and col. 13, ll. 16-18) comprising first and second data, the first and second data being respectively associated with first and second scenes of said single 3D animated content (see fig. 3; col. 7, ll. 31-34, col. 8, ll. 2-10), for the purpose of adding interactivity to the user (col. 2, ll. 35-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the 3D animated content of Kalra to include first and second data, the first and second data being respectively associated with first and second scenes of said single 3D animated content, as taught by Meyer, for the purpose of adding interactivity to the user. Kalra and Meyer fail to disclose means for identifying a duration of said first and second scenes; storing the first and second scenes in first and second files associated with each scene, each of said files being of a size calculated from the identified data rate and the duration of the scene; streaming each file over the network during playback of the respective scene; and, each stream file is calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene.

In an analogous art, Zamiska discloses means (information manager 108, fig. 2) for identifying the duration of a scene (identifying the duration of a stream, col. 7, ll. 64-67, where the duration of a stream comprising a digital source information file corresponds to the duration of the source information (scene) from which it was captured, e.g., from a 30 minute reel of film, col. 7, ll. 53-58), for the purpose of facilitating the synchronization of various streams (col. 7, ll. 39-51).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra and Meyer to include means for identifying the duration of each of said first and second scenes scene, as taught by Zamiska, for the purpose of facilitating the synchronization of various streams in a system for distributing 3D animated content.

Kalra, Meyer, and Zamiska fail to disclose each of said files being of a size calculated from the identified data rate and the duration of the scene; streaming each file over the network during playback of the respective scene; and, each stream file is calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene.

Additionally, in an analogous art, Progressive Networks discloses a stream file being of a size calculated from an identified data rate (where the file is appropriately encoded according to available bandwidth, pg. 29, 67, and 68) and the duration of said scene (where the size of a steam file is inherently calculated based on the duration of a scene, i.e., file size is $\geq$ (data rate of the file) x (scene duration)); said stream file calculated to finish downloading by the remote user computer prior to the end of the playback of said scene (where the data rate of the file to stream is determined based on the bandwidth supported by the client, pg. 67, and the server selects the highest bandwidth file supported by the client (i.e., stream bandwidth is equal to or less than the client bandwidth), the stream file is inherently calculated to finish downloading prior to the end of the playback of the scene), for the purpose of delivering the best quality stream that is supported by the connection (pg. 67).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra, Mayer and Zamiska and to include each stream file being of a size calculated from the identified data rate and the duration of the respective scene; each stream file is streamed over the network during playback of the respective scene; and each stream file calculated to finish downloading by the remote user computer prior to the end of the playback of the respective scene, as taught by Progressive Networks, for the purpose of delivering the best quality stream that is supported by the connection in a system for distributing 3D animated content.

As for claim 15, Kalra, Meyer, Zamiska and Progressive Networks together disclose the system of claim 14. In addition, Kalra discloses the streaming data comprises animation data (streams comprise 3-D animation, col. 4, ll. 47-52).

As for claim 16, Kalra, Meyer, Zamiska and Progressive Networks together disclose the system of claim 14. In addition, Kalra discloses the streaming data in the stream file is packaged into a plurality of streamable blocks (where adaptive digital streams, e.g., base stream $14A_b$, first additive stream $14A_1$, etc., fig. 2A, are individual streams or "blocks" of streamable data, selected by stream management module 20 for transmission to the client, col. 4, ll. 14-32).

With regard to claim 17, Zamiska further discloses streamable blocks are allocated a position in a stream file based on a time in which each streamable block is required by the user computer (information manager 108 positions various streams according to respective start times relative to a time axis of the data cube 120, col. 7, ll. 52-63), for the purpose of facilitating the synchronization of various streams (col. 7, ll. 39-51).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra to include streamable blocks are allocated a position in a stream file based on a time in which each streamable block is required by the user computer, as taught by Zamiska, for the purpose of facilitating the synchronization of various streams in a system for distributing 3D animated content.

With regard to claim 20, Kalra, Meyer, Zamiska and Progressive Networks together disclose an Internet connection for delivering the pre-load file and the stream file to the remote user computers (Meyer, col. 2, ll. 32-33).

5. Claim 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra, Meyer, Zamiska, and Progressive Networks as applied to claim 1 above, and further in view of Brunson (of record).

As for claim 5, Kalra, Meyer, Zamiska, and Progressive Networks together disclose the subject matter of claim 1. In particular, Kalra discloses the pre-load file comprising pre-load data for playing 3D animated content (col. 19, ll. 52-57). Kalra, Meyer, Zamiska, and Progressive Networks fail to disclose the file contains a header portion and a body portion, the header portion including a directory of files.

In an analogous art, Brunson discloses a file contains a header portion and a body portion, the header portion including a directory of files (col. 4, ln 61 – col. 5, ln. 11, where the body portion contains files linked via pointers to the header component), for the purpose of specifying information relevant to the body of the message (col. 4, ll. 64-67).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra, Meyer, Zamiska, and Progressive Networks to include the file contains a header portion and a body portion, the header portion including a directory of files, as taught by Brunson, for the purpose of specifying information relevant to the body of the message in a system for distributing 3D animated content.

As for claim 6, Kalra, Meyer, Zamiska, Progressive Networks, and Brunson together disclose the claimed subject matter. In particular, Brunson discloses the header portion includes a type code (header element 702, fig. 2) and a location code (pointer, col. 5, ll. 8-11), the type code for indicating a file type of each file listed in the directory (header contains information regarding what message body components it contains, col. 4, ll. 64-67) where message body components may comprise voice, text, video, etc., col. 5,

ll. 4-7), and the location code for indicating a file location of each file listed in the directory (where a pointer inherently indicates the location).

6. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra, Meyer, Zamiska, and Progressive Networks as applied to claim 1 above, and further in view of Roach (of record).

With regard to claims 8 and 13, Kalra, Meyer, Zamiska, and Progressive Networks together disclose delivering 3D animated content to a remote computer via streaming (see rejection of claim 1). Kalra, Meyer, Zamiska, and Progressive Networks fail to disclose a multipath movie with a plurality of plot alternatives, with each plot alternative capable of being selected by a user after the file associated with the scene is loaded by the computer.

In an analogous art, Roach discloses a multipath movie with a plurality of plot alternatives, each plot alternative capable of being selected by a user (by interacting with an icon, col. 5, ll. 36-63) after the file associated with the scene is loaded by the computer (where the scene has been displayed by the computer to the user, the file associated with that scene has inherently been loaded by the computer), for the purpose of enabling the user to experience an alternate location in the storyline (col. 5, ll. 59-63).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra, Meyer, Zamiska, and Progressive Networks to include a multipath movie with a plurality of plot alternatives, each plot alternative capable of being selected by a user after the file associated with the scene is loaded by the computer, as taught by Roach, for the purpose of enabling the user to experience an alternate location in the storyline in a system for distributing 3D animated content.

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra, Meyer, Zamiska and Progressive networks as applied to claim 14 above, and further in view of Brunson.

As for claim 18, Kalra, Meyer, Zamiska and Progressive Networks together disclose the system of claim 14. In addition, Kalra discloses the pre-load file comprising pre-load data for playing 3D animated content (col. 19, ll. 52-57). Kalra, Meyer, Zamiska and Progressive Networks fail to disclose the file contains a header portion and a body portion, the header portion including a directory of files.

In an analogous art, Brunson discloses a file contains a header portion and a body portion, the header portion including a directory of files (col. 4, ln 61 – col. 5, ln. 11, where the body portion contains files linked via pointers to the header component), for the purpose of specifying information relevant to the body of the message (col. 4, ll. 64-67).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra, Meyer, Zamiska and Progressive Networks to include the file contains a header portion and a body portion, the header portion including a directory of files, as taught by Brunson, for the purpose of specifying information relevant to the body of the message in a system for distributing 3D animated content.

As for claim 19, Kalra, Meyer, Zamiska, Progressive Networks and Brunson together disclose the claimed subject matter. In particular, Brunson discloses the header portion includes a type code (header element 702, fig. 2) and a location code (pointer, col. 5, ll. 8-11), the type code for indicating a file type of each file listed in the directory (header contains information regarding what message body components it contains, col. 4, ll. 64-67) where message body components may comprise voice, text, video, etc., col. 5, ll. 4-7), and the location code for indicating a file location of each file listed in the directory (where a pointer inherently indicates the location).

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra, Meyer, Zamiska and Progressive Networks as applied to claim 20 above, and further in view of McCutchen (of record).

With regard to claim 21, Kalra, Meyer, Zamiska and Progressive Networks together disclose the pre-load file and stream file of claim 20. However, Kalra, Meyer, Zamiska and Progressive Networks fail to disclose a projector for playing the animated content.

In an analogous art, McCutchen discloses the user of a video projector to display animated content, for the purpose of providing a display means that is compact, lightweight, and easy to manufacture (col. 85, ll. 63-67).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kalra, Meyer, Zamiska and Progressive Networks to include a video projector for playing the animated content, as taught by McCutchen, for the purpose of providing a display means that is compact, lightweight, and easy to manufacture in a system for distributing 3D animated content.

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra in view of Meyer.

Regarding claim 22, Meyer discloses a computer-implemented method for delivering a single media production (animated sequence) to a remote device (user's computer) over a data communications network (Internet, col. 6, ll. 42-50), the method comprising:

identifying first media content associated with a first portion of the single media production and second media content associated with a second portion of the single media production (initial and follow-on sequences, col. 7, ll. 30-35); and

streaming the first and second stream files to the remote device (col. 8, ll. 2-10).

Meyer fails to disclose identifying a data rate available to the remote device; identifying a first duration of the first portion of the single media production and a second duration of a second portion of the single media production; allocating a first size to a first stream file based on the identified data rate and the first duration, and a second size to a second stream file based on the identified data rate and the

second duration; and inserting at least a portion of the first media content associated with the first portion into the allocated first size of the first stream file, and at least a portion of the second media content associated with the second portion into the allocated second size of the second stream file.

In an analogous art, Progressive Networks discloses identifying a data rate available to the remote device (p. 67); allocating sizes to stream files based on the identified data rate and durations (pp. 29 and 30, where encoding a stream file at various bit rates optimized for an available bandwidth constitutes allocating a size to a stream file based on the identified data rate and duration, as addressed in the rejection of claim 1); and inserting at least portions of the media content associated with the portions into the allocated sizes of the stream files (pp. 28 and 29, where encoding a file at a particular bit rate constitutes allocating portions of the media content into the allocated sizes of the stream files; e.g., where a source file has a data rate of 100 kbps, encoding said source file at 50 kbps constitutes allocating approximately one half of the media content into the allocated size of the encoded stream file), for the purpose of providing the remote device (client) the best possible quality the remote device can handle (p. 67).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Meyer to include identifying a data rate available to the remote device; allocating a first size to a first stream file based on the identified data rate and the first duration, and a second size to a second stream file based on the identified data rate and the second duration; and inserting at least a portion of the first media content associated with the first portion into the allocated first size of the first stream file, and at least a portion of the second media content associated with the second portion into the allocated second size of the second stream file, as taught by Progressive Networks, for the purpose of providing the remote device the best possible quality the remote device can handle. Meyer and Progressive networks fail to disclose identifying a first duration of the first portion of the single media production and a second duration of a second portion of the single media production.

Additionally, in an analogous art, Zamiska discloses means (information manager 108, fig. 2) for identifying the duration of a scene (identifying the duration of a stream, col. 7, ll. 64-67, where the duration of a stream comprising a digital source information file corresponds to the duration of the source information (scene) from which it was captured, e.g., from a 30 minute reel of film, col. 7, ll. 53-58), for the purpose of facilitating the synchronization of various streams (col. 7, ll. 39-51).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Meyer and Progressive Networks to include means for identifying the duration of each of said first and second scenes, as taught by Zamiska, for the purpose of facilitating the synchronization of various streams in a system for distributing 3D animated content.

10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer, Progressive Networks, and Zamiska as applied to claim 22 above, and further in view of U.S. Patent No. 6,134,596 to Bolosky et al. (hereinafter "Bolosky").

Regarding claim 23, Meyer, Progressive Networks, and Zamiska together disclose the method of claim 22. However, they fail to disclose the media content in each stream file is streamed via a plurality of data blocks, each data block being associated with a start transmission time, the method further comprising:

assigning a start transmission time to a first data block bases on a first size of the first data block and the identified data rate;

assigning a start transmission time to each successive data block based on its respective size and the identified data rate; and

recursively updating a start time of a previous data block based on the calculation of the start transmission time of the successive data block.

In an analogous art, Bolosky discloses a method of streaming media content to a client system in which the media content in each stream file is streamed via a plurality of data blocks, each data block being associated with a start transmission time (col. 8, l. 63 – col. 9, l. 25 and col. 16, ll. 35-40), the method further comprising:

assigning a start transmission time to a first data block based on a first size of the first data block and the identified data rate (col. 16, ll. 59-66, where the scheduler provides lead time sufficient to account for processing, communication, and disk bandwidth, this lead time is at least long as the data rate times the block size, and as such the transmission time is based at least in part on these two factors);

assigning a start transmission time to each successive data block based on its respective size and the identified data rate (where the transmission schedule accounts for each block of the file, col. 8, l. 63 – col. 9, l. 3)

recursively updating a start time of a previous data block based on the calculation of the start transmission time of the successive data block (i.e., resolving read conflicts in favor of reading a block first with the soonest deadline, col. 9, ll. 19-25), for the purpose of timely streaming the data to the clients (col. 9, ll. 1-3).

Regarding claim 27, the computer-implemented method of claim 27 is substantially identical to the method of claims 22 and 23. Each of Meyer, Progressive Networks, Zamiska, and Bolosky discloses their respective teachings as a computer implemented-method. Accordingly, claim 27 is rejected in view of Meyer, Progressive Networks, Zamiska and Bolosky for the reasons set forth in the rejections of claims 22 and 23 above.

Allowable Subject Matter

11. Claims 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M Lambrecht
Examiner
Art Unit 2611

CML

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PRIMARY EXAMINER